

Serial No. 09/417,523

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Atty Docket No. 21726/90386

Please add following new claims:

13. A method for determining whether a compound or mixture of compounds is suitable for intended use as a drug or a natural product, said method comprising:

- a. placing a first solution comprising biological material having higher molecular weights than the compounds or mixture of compounds, into an ultrafiltration chamber, said chamber comprising a membrane with pore sizes that will not allow passage of the biological material out of the chamber;
- b. placing the compound or mixture of compounds into the ultrafiltration chamber, said chamber comprising a membrane with pore sizes that allow passage of the compound or mixture of compounds out of the chamber;
- c. providing a supportive solution to the ultrafiltration chamber that facilitates reactions between the biological material and the compound or mixtures of compounds to produce products of the reactions wherein the ultrafiltration chamber allows passage of the products out of the chamber to form a second solution;
- d. analyzing the second solution comprising the products of the reactions between the biological material and the compound or mixture of compounds, to determine whether the compound or any of the mixture of compounds is suitable for use as a drug or natural product.

14. The method of claim 13, wherein the biological material is selected from a group consisting of a protein, a peptide, an oligonucleotide, an oligosaccharide, a microsome, a cell, a tissue, an enzyme, a receptor, DNA and RNA.

15. The method of claim 13, wherein the compound or mixture of compounds is selected from the group consisting of a natural product, a combinatorial library, a drug, a drug mixture, a xenobiotic compound, a mixture of xenobiotic compounds, an endogenous compound, a mixture of natural products, and a mixture of endogenous compounds.

16. The method of claim 13, wherein the supportive solution is selected from a group consisting of a buffer, a nutrient medium, or a combination thereof, said supportive solution maintaining the biological material in a state wherein the biological material reacts with a compound or mixture of compounds in the sample.

17. The method of claim 16, wherein the supportive solution facilitates the reactions of the biological material with the first solution and facilitates the removal of compounds, or mixture of compounds and products of the reactions between the compound or mixture of compounds and the biological material, by washing them through the ultrafiltration chamber into the second solution.

18. The method of claim 13, wherein the compound or mixture of compounds is added by means of injection.

19. The method of claim 13, wherein the suitable conditions for reactions between the biological material in the first solution with the compound or mixture of compounds, comprises mixing the sample with the biological material to achieve a homogeneous distribution of sample, controlling temperature to maintain function of the biological material, providing adequate concentration of sample and sufficient amount of biological material to facilitate analysis, providing sufficient time for interaction, and controlling atmospheric gases to maintain function of the biological material.

20. The method of claim 13 is a high throughput method.

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21. The method of claim 13, wherein the analyzing of the second solution is by mass spectrometry.
22. The method of claim 13, wherein the products of the reactions comprise metabolites, glutathione adducts, and small molecules to determine cellular absorption.
23. The method of claim 13, wherein multiple chambers with ultrafiltration membranes are arranged in parallel with a single mass spectrometer for step d.
24. A kit for analyzing a compound or mixture of compounds to determine if a compound or any of the mixture of compounds are suitable for use as a drug or natural product, by analyzing reaction products between biological material and the compound or mixture of compounds, said kit comprising in separate containers, (a) an ultrafiltration membrane with pore sizes that allow passage of the compound or mixture of compounds and reaction products, but not passage of the biological material, (b) a first solution containing the biological material, and (c) standards against which to compare analysis of the products of reactions between the first solution and the compounds or mixture of compounds to determine suitability as a drug or natural product.

### REMARKS

#### I. Comparison of New Versus Old Claims

NEW CLAIMS	OLD CLAIMS
<p>13. A method for determining whether a compound or mixture of compounds is suitable for intended use as a drug or a natural product, said method comprising:</p> <p>a. placing a first solution comprising biological material having higher molecular weights than the compounds or mixture of compounds, into an ultrafiltration chamber, said chamber comprising a</p>	<p>1. A method for determining whether a compound from a sample has predetermined characteristics that would make it suitable for a specific purpose, said purpose comprising drug development and screening for metabolic parameters, said method comprising:</p> <p>a. obtaining a biological material in a first solution or suspension;</p> <p>b. inducing a flow of a supportive solution through the first solution</p>